Zenite® 5115L

Celanese Corporation - Liquid Crystal Polymer

Sunday, November 3, 2019

General Information

Product Description

Zenite® 5115L is a 15% glass fiber reinforced liquid crystal polymer for injection molding with improved toughness.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber, 15% Filler by Weight		
Features	• Good Toughness		
RoHS Compliance	• Contact Manufacturer		
Processing Method	• Injection Molding		

ASTM & ISO Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	1.50	g/cm³	ISO 1183
Molding Shrinkage			ISO 294-4
Across Flow	0.90	%	
Flow	0.20	%	
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	1.67E+6	psi	ISO 527-2/1A
Tensile Stress (Break)	25400	psi	ISO 527-2/1A/5
Tensile Strain (Break)	3.0	%	ISO 527-2/1A/5
Flexural Modulus (73°F)	1.52E+6	psi	ISO 178
Flexural Stress (73°F)	24700	psi	ISO 178
Thermal	**Nominal Value**	**Unit**	**Test Method**
Heat Deflection Temperature (264 psi, Unannealed)	527	°F	ISO 75-2/A
Melting Temperature [2]	606	°F	ISO 11357-3
Electrical	**Nominal Value**	**Unit**	**Test Method**
Relative Permittivity (1 MHz)	2.50		IEC 60250
Dissipation Factor (1 MHz)	0.016		IEC 60250
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (0.031 in)	V-0		UL 94

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	302	°F
Drying Time	3.0	hr
Suggested Max Moisture	0.010	%
Hopper Temperature	68 to 86	°F
Rear Temperature	608 to 626	°F
Middle Temperature	635 to 653	°F
Front Temperature	635 to 653	°F
Nozzle Temperature	635 to 653	°F
Processing (Melt) Temp	617 to 653	°F

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Injection	Nominal Value	Unit
Mold Temperature	176 to 248	°F
Back Pressure	< 435	psi

Injection Notes

Feeding zone temperature: 40 to 60°C
Zone4 temperature: 335 to 345°C

Notes

[1] Typical properties: these are not to be construed as specifications.

[2] 10°C/min